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In The Claims:

~~PATENT CLAIMS~~

Claims 1-18 (canceled without prejudice or disclaimer).

Claim 19. (New) A relative pressure sensor for measuring a pressure difference between a pressure being measured and the ambient atmospheric pressure, comprising:

a platform; and

a measuring membrane loadable with a pressure being measured, wherein:

said measuring membrane is secured at its edge to said platform;

said pressure chamber is formed between said platform and said measuring membrane; and

said pressure chamber communicates over a reference air path with the atmosphere, said reference air path includes a winding path.

Claim 20. (New) The relative pressure sensor as claimed in claim 19, wherein:

said winding path lies essentially in a plane.

Claim 21. (New) The relative pressure sensor as claimed in claim 20, wherein:

said plane extends parallel to the plane of said measuring membrane.

Claim 22. (New) The relative pressure sensor as claimed in claim 22, wherein:

the length of the projection of said winding path onto the plane of said membrane amounts to at least 50%, preferably at least 65%, and especially preferably at least 80% of the total length of said winding path.

Claim 23. (New) The relative pressure sensor as claimed in claim 19, wherein:

the length of said winding path amounts preferably to at least 75%, more preferably to at least 100% and especially preferably to 150%, of the length of the perimeter of said measuring membrane.

Claim 24. (New) The relative pressure sensor as claimed in claim 19, wherein:

the length of said winding path is at least twice as long as the separation of an atmosphere-side opening of said winding path from the plane of said measuring membrane.

Claim 25. (New) The relative pressure sensor as claimed in claim 19, wherein:

said winding path includes a line-shaped depression in a surface of a component of said relative pressure sensor.

Claim 26. (New) The relative pressure sensor as claimed in claim 19, wherein:

said winding path includes a winding canal, which extends in at least one component of said relative pressure sensor between two openings in surface sections of the component.

Claim 27. (New) The relative pressure sensor as claimed in claim 19, wherein:

said winding path has a cross sectional area of less than 2 mm^2, preferably less than 1 mm^2 and especially preferably n the range of 0.7 to 0.4 mm^2.

Claim 28. (New) The relative pressure sensor as claimed in claim 19, wherein:

the separation of the plane of said winding path from the plane of said measuring membrane is preferably smaller than the length of said winding path, especially preferably less than 75% of the length of said winding path and very specially preferably less than 50% of the length of said winding path.

Claim 29. (New) The relative pressure sensor as claimed in claim 19, wherein:

said winding path is in thermal contact with the platform-side wall of said pressure chamber such that any cross section extending parallel to said separating membrane between any point of said winding path and the platform-side wall of said pressure chamber has a surface area fraction of heat conducting material amounting to at least 10%, preferably at least 25% and especially preferably at least 50%, of said membrane surface area.

Claim 30. (New) The relative pressure sensor as claim in claim 19, wherein:

said reference air path has a filter element at its atmosphere-side inlet opening, for preventing the incursion of condensate into said reference air path.

Claim 31. (New) The relative pressure sensor as claimed in claim 30, wherein:

said filter element is in thermal contact with said winding path.

Claim 32. (New) The relative pressure sensor as claimed in claim 30, wherein:

said filter element is hydrophobic or treated to be hydrophobic.

Claim 33. (New) The relative pressure sensor as claimed in claim 30, wherein:

said filter element comprises one of:

a ceramic, metallic and organic material.

Claim 34. (New) The relative pressure sensor as claimed in claim 34, wherein:

said chamber is hermetically sealed from its environment; and

additionally, at least one electronic component is arranged in said chamber.

Claim 36 (New) The relative pressure sensor as claimed in claim 19, wherein:

said winding path extends spirally or helically.